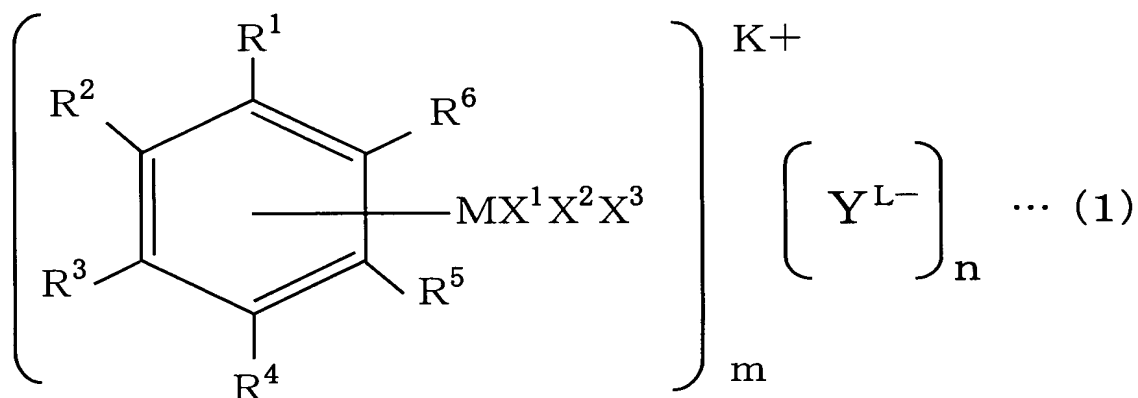


AMENDMENTS TO THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A reducing process of carbon dioxide, comprising mixing carbon dioxide and water with an organometallic complex represented by general formula (1)



where R¹, R², R³, R⁴, R⁵, and R⁶ independently represent a hydrogen atom or a lower alkyl group, M represents an element that can be coordinated to the benzene ring, X¹ and X² represent nitrogen-containing ligands, X³ represents a hydrogen atom, a carboxylic acid residue, or H₂O, X¹ and X² may be bonded to each other, Y represents an anion species, K represents a valency of a cation species, L represents a valency of an anion species, K and L independently represent 1 or 2, and K, m, L, and n are related to one another by K x m = L x n.

2. (Original) A reducing process of carbon dioxide as set forth in Claim 1, wherein, in the organometallic complex represented by general formula (1), M represents a group 8 element or a group 9 element of the periodic table.

3. (Original) A reducing process of carbon dioxide as set forth in Claim 2, wherein in the organometallic complex represented by general formula (1), M is Ru.

4. (Currently Amended) A reducing process of carbon dioxide as set forth in ~~one of Claims 1, 2, and 3~~Claim 1, wherein, in the organometallic complex represented by general formula (1), Y is one of a formate ion, a halide ion, a triflate ion, a sulfate ion, a perhalogen acid ion, a tetrafluoroborate ion, a hexafluorophosphoric acid ion, and a thiocyanate ion.

5. (Currently Amended) A reducing process of carbon dioxide as set forth in ~~one of Claims 1 to 4~~Claim 1, wherein, in the organometallic complex represented by general formula (1), the nitrogen-containing ligands represented by X¹ and X² are 4,4'-dimethoxy-2,2'-bipyridine.

6. (Currently Amended) A reducing process of carbon dioxide as set forth in ~~one of Claims 1 to 5~~Claim 1, wherein a pH of a reaction system mixing the organometallic complex, carbon dioxide, and water is 6 or below.

7. (Currently Amended) A reducing process of carbon dioxide as set forth in ~~one of Claims 1 to 6~~Claim 1, wherein, when reducing the carbon dioxide by mixing the organometallic complex, carbon dioxide, and water, the pH of the reaction system is changed.

8. (New) A reducing process of carbon dioxide as set forth in Claim 5, comprising the steps of:
adding hydrogen to a reaction system mixing the organometallic complex of general formula (1), carbon dioxide, and water, where the nitrogen-containing ligands represented by X¹ and X² are 4,4'-dimethoxy-2,2'-bipyridine; and
applying a pressure on the reaction system.

9. (New) A reducing process of carbon dioxide as set forth in Claim 2, wherein, in the organometallic complex represented by general formula (1), Y is one of a formate ion, a halide ion, a triflate ion, a sulfate ion, a perhalogen acid ion, a tetrafluoroborate ion, a hexafluorophosphoric acid ion, and a thiocyanate ion.

10. (New) A reducing process of carbon dioxide as set forth in Claim 3, wherein, in the organometallic complex represented by general formula (1), Y is one of a formate ion, a halide ion, a triflate ion, a sulfate ion, a perhalogen acid ion, a tetrafluoroborate ion, a hexafluorophosphoric acid ion, and a thiocyanate ion.

11. (New) A reducing process of carbon dioxide as set forth in Claim 2, wherein, in the organometallic complex represented by general formula (1), the nitrogen-containing ligands represented by X¹ and X² are 4,4'-dimethoxy-2,2'-bipyridine.

12. (New) A reducing process of carbon dioxide as set forth in Claim 3, wherein, in the organometallic complex represented by general formula (1), the nitrogen-containing ligands represented by X¹ and X² are 4,4'-dimethoxy-2,2'-bipyridine.

13. (New) A reducing process of carbon dioxide as set forth in Claim 4, wherein, in the organometallic complex represented by general formula (1), the

nitrogen-containing ligands represented by X^1 and X^2
are 4,4'-dimethoxy-2,2'-bipyridine.

14. (New) A reducing process of carbon dioxide as set forth in Claim 2, wherein a pH of a reaction system mixing the organometallic complex, carbon dioxide, and water is 6 or below.

15. (New) A reducing process of carbon dioxide as set forth in Claim 3, wherein a pH of a reaction system mixing the organometallic complex, carbon dioxide, and water is 6 or below.

16. (New) A reducing process of carbon dioxide as set forth in Claim 4, wherein a pH of a reaction system mixing the organometallic complex, carbon dioxide, and water is 6 or below.

17. (New) A reducing process of carbon dioxide as set forth in Claim 5, wherein a pH of a reaction system mixing the organometallic complex, carbon dioxide, and water is 6 or below.

18. (New) A reducing process of carbon dioxide as set forth in Claim 2, wherein, when reducing the carbon dioxide by mixing the organometallic complex, carbon dioxide, and water, the pH of the reaction system is changed.

19. (New) A reducing process of carbon dioxide as set forth in Claim 3, wherein, when reducing the carbon dioxide by mixing the organometallic complex, carbon dioxide, and water, the pH of the reaction system is changed.

20. (New) A reducing process of carbon dioxide as set forth in Claim 4, wherein, when reducing the carbon dioxide by mixing the organometallic complex, carbon

dioxide, and water, the pH of the reaction system is changed.

21. (New) A reducing process of carbon dioxide as set forth in Claim 5, wherein, when reducing the carbon dioxide by mixing the organometallic complex, carbon dioxide, and water, the pH of the reaction system is changed.

22. (New) A reducing process of carbon dioxide as set forth in Claim 6, wherein, when reducing the carbon dioxide by mixing the organometallic complex, carbon dioxide, and water, the pH of the reaction system is changed.

23. (New) A reducing process of carbon dioxide as set forth in Claim 6, comprising the steps of:

adding hydrogen to a reaction system mixing the organometallic complex of general formula (1), carbon dioxide, and water, where the nitrogen-containing ligands represented by X^1 and X^2 are 4,4'-dimethoxy-2,2'-bipyridine; and

applying a pressure on the reaction system.

24. (New) A reducing process of carbon dioxide as set forth in Claim 7, comprising the steps of:

adding hydrogen to a reaction system mixing the organometallic complex of general formula (1), carbon dioxide, and water, where the nitrogen-containing ligands represented by X^1 and X^2 are 4,4'-dimethoxy-2,2'-bipyridine; and

applying a pressure on the reaction system.